METHODS FOR PRODUCING AND/OR PURIFYING 2-HYDROCARBYL-3,3-BIS(4-HYDROXYARYL)PHTHALIMIDINE MONOMERS AND POLYCARBONATES DERIVED THEREFROM

ABSTRACT OF THE DISCLOSURE

[0104] Disclosed herein is a method for producing a 2-hydrocarbyl-3,3-bis(4hydroxyaryl)phthalimidine. The method comprises forming a reaction mixture comprising at least one substituted or unsubstituted phenolphthalein, at least one substituted or unsubstituted primary hydrocarbyl amine, and an acid catalyst; and heating the reaction mixture to a temperature of less than 180 °C to remove a distillate comprising water and form crude 2-hydrocarbyl-3,3-bis(4hydroxyaryl)phthalimidine product; where the 2-hydrocarbyl-3,3-bis(4hydroxyaryl)phthalimidine has a formula:

$$R^2$$
 $N-R^1$ N

where R^1 is selected from the group consisting of a hydrogen and a hydrocarbyl group, and R^2 is selected from the group consisting of a hydrogen, a hydrocarbyl group, and a halogen.